

A7 – Specified Roads, applicable to B5.2

Name and Date of Governing Road Specifications: Standard Specifications for Construction of Roads and Bridges On Federal Highway Projects, FP-03, 2003 Version

| Project | | Design Class | Approx. Length (mi./km.) | Sheet Numbers and Approval Date | Performance Responsibility | | |
|----------|--|---------------------|--------------------------|---------------------------------|----------------------------|--------|------------------------------|
| Road No. | Name | | | | Survey | Design | Const. Staking ^{1/} |
| 2223000 | French Creek (R) (segment MP 0.00 to 8.32) | Single Lane - 25mph | 8.32/13.48 | 1-21 | FS | FS | FS, (BC) |
| 2223501 | Dunham Creek (R) (segment MP 0.00 to 3.50) | Single Lane - 15mph | 3.50/5.67 | 1-21 | FS | FS | FS, (BC) |
| 2223520 | Halls Ridge (R) (segment MP 0.00 to 3.93) | Single Lane - 15mph | 3.93/6.37 | 1-21 | FS | FS | FS, (BC) |
| 2223525 | No Name (R) (segment MP 0.00 to 0.83) | Single Lane - 10mph | 0.83/1.34 | 1-21 | FS | FS | FS, (BC) |

^{1/} Indicate timing, i.e., before clearing (BC) or after clearing (AC). Applicable to B5.212.

A8 – Forest Service Engineering Completion Schedule, applicable to B5.21

| Road No. | Road Name | Type of Work | Completion Date |
|---|--------------|-----------------------|-----------------|
| 2223000 | French Creek | *Construction Staking | 10/31/xx |
| 2223501 | Dunham Creek | *Construction Staking | 10/31/xx |
| 2223520 | Halls Ridge | *Construction Staking | 10/31/xx |
| 2223525 | No Name | *Construction Staking | 10/31/xx |
| <p>* Any additional construction staking other than initial FS station staking is the responsibility of the purchaser. Refer to FP-03 & Supplemental Specification 152 – Construction Surveying and Staking</p> | | | |

A9 – Scaling Instructions and Specifications, applicable to B6.8

Name and Date of Governing Instructions: _____

| Scaling Specifications | | | | | |
|------------------------|---------|-------------------------------|-------------------------|---------------------|-------------------------|
| Species | Product | Maximum Scaling Length (feet) | Trim Allowance | | |
| | | | Diameter Range (inches) | Length Range (feet) | Trim Allowance (inches) |
| | | | | | |

Sale Name: Halls Thin ReOffer

TRAFFIC CONTROL PLAN AND SPECIFICATIONS PURSUANT TO B6.33 SAFETY

Unless otherwise agreed, the following measures are required to provide adequate warning of hazards for users of roads and trails adjacent to Purchaser's Operations.

Part I. Signing and Other Warning Methods:

(a) Signs. The following signs are required when Purchaser's Operations are in progress adjacent to or on Forest Service controlled roads and trails:

| <u>MINIMUM LETTER SIZE AND LEGEND</u> | <u>MINIMUM SIZE AND SHAPE</u> | <u>WHEN AND WHERE REQUIRED</u> |
|---|-----------------------------------|--|
| 1. LOGGING OPERATIONS NEXT <> MILES (4" letters) | 24" (rectangle) 36" | Min. 100 ft. outside of any continuous work areas, on roads listed in C5.31# and trails listed in Part II. |
| 2. LOGGING OPERATIONS (3" letters) | 24" (diamond) 24" | To be used in conjunction with "Logging Operations Next <> Miles" and where work area is not continuous. |
| 3. FOR LOGGING USE ONLY (3" letters) | 24" (diamond) 24" | Required where roads listed in C5.31# and temporary roads intersect with C5.31# roads. Install a cross ditch to discourage use when sign is covered or removed for extended periods. |
| 4. TRUCKS (4" letters) | 24" (diamond) 24" | At critical intersections on roads listed in C5.31# when traffic is heavy or otherwise exceeds volumes stated in Part II below. Remove or cover when the sign is not applicable. |
| 5. END LOGGING OPERATIONS (4" letters) | 24" (rectangle) 36" | Use in conjunction with "Logging Operations Next <> Miles" and "Logging Operations." |
| 6. TREE FELLING AHEAD (3" letters) | 24" (diamond) 24" | Required 200 feet in advance of danger area where timber is being felled adjacent to all roads, including temporary roads, and trails. |
| 7. ROAD MACHINERY AHEAD (3" letters) | 24" (diamond) 24" | Required at least 200 feet in advance of Purchaser road maintenance operations on roads listed in Schedule C5.31#. |

Sale Name: Halls Thin

TRAFFIC CONTROL PLAN AND SPECIFICATIONS - B6.33 Safety (continued)

All signs shall meet requirements as specified in Parts I and VI of the Manual of Uniform Traffic Control Devices (MUTCD).

Sign borders and lettering shall be black. Borders are 1/2 inch wide, inset 1/2 inch from outside edge of sign. All sign backgrounds shall be orange, except signs #1 and 5 which shall be reflectorized orange.

Signs shall be installed on posts, with a 5 foot minimum ground clearance, or on temporary supports complying with MUTCD standards.

All signs are to be removed or covered when operations are interrupted for seasonal nonuse or other extended periods.

Purchaser shall furnish flag personnel and advance warning signs when cable or helicopter logging above roads or trails, felling adjacent to roads or trails, where logs being bucked may roll into roads or trails, and in areas where fallout from blasting may occur. On roads listed in C5.31# and temporary roads, Purchaser may temporarily block the road in lieu of furnishing flag personnel.

(b) Barricades. On roads listed in CT5.31#, if Purchaser's Operations cause the traveled way or road shoulders to be constructed overnight, or longer, by such obstructions as decked logs, parked equipment, or piled slash, Purchaser shall place barricades on both sides of the encroaching obstruction to safely channel traffic around such obstructions. Barricades shall remain in place until the obstruction is removed.

Barricades shall be Type II and meet specifications in MUTCD, Part VI. Barricades must be at least 3 feet high. Rails must be at least 2 feet long. Striping shall be alternating orange and white, sloping at a 45 degree angle, and reflectorized. For rails 2 feet to 3 feet long, striping shall be 4 inches wide. For rails longer than 3 feet, striping shall be 6 inches wide. Two rails, 8-12 inches in width, must face each direction.

Barricades shall be equipped with warning lights which shall be Type A low intensity flashing and shall be maintained so as to be capable of being visible on a clear night from a distance of 3,000 feet.

(c) Other Traffic Control Methods. The posting of CB channel signs may be authorized.

On roads listed in C5.31#, Purchaser may be authorized to install temporary gates, barricades (except cables), or natural barriers. The devices must be installed with the necessary hazard markers, be reasonably passable by Forest Service, and be removed prior to acceptance of the subdivision being served by the road.

Sale Name: Thin

TRAFFIC CONTROL PLAN AND SPECIFICATIONS - B6.33 SAFETY (continued)

Part II.

"No Commercial Use" on legal holidays or weekends (Friday 6:00 p.m. through Sunday midnight) from Memorial Day through Labor Day.

Purchaser shall post "truck traffic ahead" signs on road 2223 to warn travelers coming from either direction. Purchaser shall sign all delays, as appropriate.

1. Purchaser and Forest Service agree to the above stated requirements of the Traffic Control Plan:

Name

Name

Title

Title

Date

Date

| Subdivisions/Units | D x D Spacing | Description of Included Timber (in order of procedural priority) |
|--------------------|---------------|---|
| 7, 8a | 14' | <p>Douglas-fir within 14 feet of a live, blue partial cut carded, orange painted boundary tree of 8 inches or greater in diameter at D x D stump height.</p> <p>Douglas-fir within 14 feet of a live conifer tree with a larger D x D stump diameter. All live trees with a larger stump diameter will remain standing after logging is complete.</p> |
| 8 | 14' | <p>All included timber within 90' of a tree with two bands of orange paint within the posted unit boundary will be removed.</p> <p>Douglas-fir within 14 feet of a live, blue partial cut carded, orange painted boundary tree of 8 inches or greater in diameter at D x D stump height.</p> <p>Douglas-fir within 14 feet of a live conifer tree with a larger D x D stump diameter. All live trees with a larger stump diameter will remain standing after logging is complete.</p> |
| 21, 27 | 16' | <p>All included timber within 90' of a tree with two bands of orange paint within the posted unit boundary will be removed.</p> <p>Douglas-fir, noble fir and true fir, within 16 feet of a live, blue partial cut carded, orange painted boundary tree of 8 inches or greater in diameter at D x D stump height.</p> <p>Douglas-fir, noble fir and true fir, within 16 feet of a live conifer tree with a larger D x D stump diameter. All live trees with a larger stump diameter will remain standing after logging is complete.</p> |

| | | |
|-------------------------------------|------------|--|
| <p>17, 17a, 19, 20, 37, 37a, 39</p> | <p>16'</p> | <p>Douglas-fir within 16 feet of a live, blue partial cut carded, orange painted boundary tree of 8 inches or greater in diameter at D x D stump height.</p> <p>Douglas-fir within 16 feet of a live conifer tree with a larger D x D stump diameter. All live trees with a larger stump diameter will remain standing after logging is complete</p> |
| <p>60, 61, 63</p> | <p>17'</p> | <p>Douglas-fir within 17 feet of a live, blue partial cut carded, orange painted boundary tree of 8 inches or greater in diameter at D x D stump height.</p> <p>Douglas-fir within 17 feet of a live conifer tree with a larger D x D stump diameter. All live trees with a larger stump diameter will remain standing after logging is complete</p> |
| <p>35</p> | <p>18'</p> | <p>All included timber within 90' of a tree with two bands of orange paint within the posted unit boundary will be removed.</p> <p>Douglas-fir, within 18 feet of a live, blue partial cut carded, orange painted boundary tree of 8 inches or greater in diameter at D x D stump height.</p> <p>Douglas-fir, within 18 feet of a live conifer tree with a larger D x D stump diameter. All live trees with a larger stump diameter will remain standing after logging is complete</p> |
| <p>72</p> | <p>18'</p> | <p>Douglas-fir, within 18 feet of a live, blue partial cut carded, orange painted boundary tree of 8 inches or greater in diameter at D x D stump height.</p> <p>Douglas-fir, within 18 feet of a live conifer tree with a larger D x D stump diameter. All live trees with a larger stump diameter will remain standing after logging is complete</p> |

| | | |
|--------------------------------|------------|--|
| <p>35g and 37g</p> | <p>N/A</p> | <p>All Douglas-fir, western hemlock, noble fir and true fir which meet the minimum tree diameter stated in A2 are designated for cutting. Additional timber to be cut, if any, will be designated for cutting in accordance with B2.37</p> |
| <p>370, 380, 400, 401, 402</p> | <p>14'</p> | <p>All coniferous species, except western white pine, western red cedar and Pacific yew within 14 feet of a live, blue partial cut carded, orange painted coniferous boundary tree with a larger DxD stump diameter.</p> <p>All coniferous species, except western white pine, western red cedar and Pacific yew within 14 feet live conifer tree with a larger DxD stump diameter which will remain standing after logging is complete.</p> |
| <p>390</p> | <p>21'</p> | <p>Douglas fir within 21 feet of a live, blue partial cut carded, orange painted coniferous boundary tree with a larger DxD stump diameter.</p> <p>Douglas fir within 21 feet of a live conifer tree with a larger DxD stump diameter which will remain standing after logging is complete.</p> |
| <p>410, 411</p> | <p>14'</p> | <p>All coniferous species, except western white pine, western red cedar and Pacific yew, within 90' of a tree with two bands of orange paint on the bole and an orange stump mark.</p> <p>All coniferous species, except western white pine, western red cedar and Pacific yew within 14 feet of a live, blue partial cut carded, orange painted coniferous boundary tree with a larger DxD stump diameter.</p> <p>All coniferous species, except western white pine, western red cedar and Pacific yew within 14 feet live conifer tree with a larger DxD stump diameter which will remain standing after logging is completed.</p> |

| | | |
|------------|--|---|
| <p>All</p> | | <p>Leave all trees greater than 35" at DxD stump height. If Felled for operational purposes these trees will remain in place unless otherwise agreed by the Forest Service.</p> |
| <p>All</p> | | <p>Tree species other than designated timber species designated by the Timber Sale Officer to be cut will be left as down wood unless otherwise agreed.</p> |

Definitions:

D x D: Designation by description.

D x D Stump Height: Measure at 4" above the ground on the uphill side of the tree. Minimum stump height left for inspection purposes will be 4 inches.

D x D Diameter: Measured at 4" stump height outside the bark of the tree with a diameter tape that is perpendicular to the bole of the tree. Stumps missing all or part of their bark will be measured as presented. Measure to the nearest tenth of an inch.

D x D Spacing: Is measured slope distance at 4" above the ground from the closest point between trees. This does not need to be measured on the uphill side of the tree.

REMOVAL SCHEDULE PURSUANT TO C3.47# - ABNORMAL DELAY (9/04)

Included Timber

Time Limits

| | |
|--|---|
| All | 60 days after felling is started |
| All timber decked during construction clearing | N/A days felling on each Specified Road constructed by Purchaser is initiated |
| Timber decked during road construction | N/A days after Forest Service authorizes Purchaser to use roads pursuant to B5.2. |

PLANS AND CRITERIA PURSUANT TO C5.1# (OPTION 1) -
TEMPORARY ROAD AND LANDING CONSTRUCTION (07/2001)

1. Rock use for landings, surface rock replacement or spot rocking of temporary roads will come from a weed free rock source.
2. Logging roads will be agreed to by the Forest Service prior to use or construction.
3. All temporary roads will be bermed, water barred, scarified and seeded with native seeds following operations, unless otherwise agreed in writing.
4. Temporary spur road in subdivision 27 will be constructed in existing template.

TABLE PURSUANT TO C5.11# - LAND USE AGREEMENTS (07/2001)

| <u>Type of Agreement</u> | <u>Grantor</u> | <u>Purpose</u> |
|--------------------------|-------------------------------|-------------------|
| Special Use Permit | Oregon Department of Forestry | Operation of Sale |

C5.12# – USE OF ROADS BY PURCHASER. (6/99) Purchaser’s use of existing roads identified on Sale Area Map by the following codes is prohibited or subject to restrictive limitations, unless agreed otherwise:

| <u>Code</u> | <u>Use Limitations</u> |
|-------------|---|
| X | Hauling prohibited |
| R | Hauling restricted |
| U | Unsuitable for hauling prior to completion of agreed reconstruction |
| P | Use prohibited |
| A | Public use restriction |
| W | Regulation waiver |

Roads coded A will be signed by Forest Service to inform the public of use restrictions. Purchaser’s use of roads coded R, A, or W shall be in accordance with the following restrictions:

TABLE PURSUANT TO C5.12# - USE OF ROADS BY PURCHASER (06/1999)

Restricted Road List Table

| Road Number | Road Name | Termini | | Map Legend | Description of Restrictions |
|-------------|--------------|---------|------|------------|--|
| | | From | To | | |
| 2223 | FRENCH CREEK | 0.00 | 8.32 | R | "No Commercial Use" on legal holidays or weekends (Friday 6:00 p.m. through Sunday midnight) from Memorial Day through Labor Day. "No snowplowing allowed from Nov 15 through May 1 due to inadequate base. |

1. The normal season of use for all roads is May 15th to October 15th.
2. Limit operations to dry conditions. Operations may be permitted during dry weather outside Operating Period. Operations will be suspended when indicators such as puddles in the road and/or water running in the ditchlines.

Title and Date of Governing Road Rules Document:

Road Rules 99
Commercial Road Rules

1999
Effective Date

WO-C5.13#

C5.13# – ROAD COMPLETION DATE. (4/04) Construction of Specified Roads shall be completed no later than 1/10/31/2014; except for earlier construction completion dates for roads listed below:

| Road Number | Road Name | Station | | Completion Date |
|-------------|-----------|---------|----|-----------------|
| | | From | To | |
| <u>2/</u> | N/A | | | |
| | | | | |
| | | | | |

Completion date is binding on the party that constructs road, whether Purchaser or Forest Service. Contracting Officer shall modify the completion date in writing to conform to the approved Plan of Operations under B6.311 at the request of Purchaser.

When Purchaser elects Forest Service construction of Specified Roads shown in sale advertisement, Forest Service may adjust construction completion date when road construction is delayed or interrupted for causes that qualify for an adjustment of the completion date of Forest Service's road construction contract. When qualifying delays or interruptions of road construction occur, Forest Service shall evaluate such occurrences and document any findings. The current status of any adjustment shall be available to Purchaser on request. Promptly after the end of Normal Operating Season in which qualifying days occur, Forest Service shall give Purchaser written notice of (a) number of qualifying days claimed, and (b) new construction completion dates. After all road construction is complete, Forest Service shall grant Contract Term Adjustment. Such adjustment shall be limited to road completion date delays that occurred during Normal Operating Season.

If Forest Service is responsible for road construction and the actual date of road completion is 1 year or more after the completion date stated above, Purchaser may request a rate redetermination under B3.3 for remaining volume. Such request must be made within 30 days of notification that road construction has been completed. Upon receipt of such request, Forest Service shall redetermine rates using standard methods in effect on the completion date of road construction. Rates to be established shall apply to all timber removed from Sale Area after the effective date of the rate redetermination.

Forest Service shall in no way be responsible for any delay or damage caused by road contractor in performing the road construction, except such delay as may be the fault or negligence of Forest Service.

When Purchaser constructs Specified Roads and requests Contract Term Adjustment, completion dates shall be adjusted by number of days that qualify for such adjustment, provided such qualifying days occur before specified construction completion date. When Purchaser desires to construct an alternate facility under B5.26, Forest Service and Purchaser shall agree, in writing, on a construction completion date for alternate facility. Contract Term Adjustment as noted above will apply. Completion date shall be adjusted where a Design Change or physical changes necessitate a modification of Specified Road construction work that increases the scope or magnitude of the required work.

If Purchaser fails to complete construction of any or all Specified Roads by applicable completion date, as adjusted, Contract Term Extension shall not be granted.

As used in this Subsection, construction of a road is completed when:

(a) Purchaser constructs Specified Roads and Forest Service furnishes Purchaser with written notice of acceptance under B6.36 or

(b) Forest Service constructs road and furnishes Purchaser with written notice authorizing use of road.

Notwithstanding B5.1, Purchaser shall not use a road that Purchaser has elected for Forest Service to construct, until construction is completed and Forest Service furnishes Purchaser with written notice authorizing use of road.

INSTRUCTIONS: Include in all new contracts when the estimated road construction cost is \$50,000 or more, where the sale requires construction of one or more specified roads to a higher standard than needed for the sale, or the road must be completed by a specific date to meet Forest Service management needs.

1/ Enter date stated in sale prospectus.

2/ Enter appropriate information for roads where completion will be required earlier than date specified in 1/. An earlier completion date shall be specified for a road only when (1) the earlier date is stated in the sale prospectus, and (2) the Public Works Contract will, upon election of Forest Service construction by purchaser, specify financial damages for contractor's failure to complete construction by the specified completion date. If there are no exceptions to the date entered in 1/, enter "None" under "Road Number."

C5.213# – DEPOSIT FOR RECONSTRUCTION ENGINEERING SERVICES. (4/04) Purchaser shall make a cash deposit for engineering services (preconstruction and construction) provided by Forest Service for reconstruction of National Forest system roads necessary to accommodate Purchaser’s use under this contract, pursuant to 16 USC 537.

The total amount to be deposited by Purchaser for reconstruction related engineering services to be completed by Forest Service personnel or by public works contract is **\$12,390.00**. Purchaser shall make this deposit at the end of the first full Normal Operating Season or 12 months from contract award, whichever occurs first. In the event a different deposit schedule is agreed to, such deposit shall be due within 15 days after the date of issue indicated on the initial bill for collection, pursuant to B4.4.

The amount of the required deposit will be shown as an associated charge on Purchaser’s Timber Sale Account. Forest Service shall retain any unexpended deposit for reconstruction related engineering services.

The deposit for reconstruction related engineering services shall be commensurate with project need and Purchaser’s road use. Forest Service shall complete reconstruction related engineering services on the following schedule unless a different completion schedule is agreed in writing:

| Road or Facility No. | Termini | | Engineering Services Completion Date |
|----------------------|----------------|--------------|--------------------------------------|
| | From Mile Post | To Mile Post | |
| 2223000 | 0.00 | 8.32 | 10/31/xx |
| 2223501 | 0.00 | 3.50 | 10/31/xx |
| 2223520 | 0.00 | 3.93 | 10/31/xx |
| 2223525 | 0.00 | 0.83 | 10/31/xx |

Reconstruction related engineering services may consist of some or all of the engineering work and expense of: preparing, setting out, controlling, inspecting, and measuring the reconstruction of a National Forest system road.

| Material | Type of Purchase | Owner(s) | Unit of Measure | Unit Price | Estimated Quantity | Total |
|----------|------------------|----------|-----------------|------------|--------------------|-------|
| | | N/A | | | | |
| | | | | | | |
| | | | | | | |

WO-C5.221#

C5.221# – MATERIAL SOURCES. (4/04) Sources of local materials are designated on Plans and Sale Area Map. Forest Service assumes responsibility for the quality and quantity of material in designated sources. Purchaser shall determine the equipment and work required to produce the specified product, including the selection of acceptable material that is reasonably available in the source that meets specifications. The designation of source includes the rights of Purchaser to use certain area(s) for plant site, stockpiles, and haul roads.

Should the designated source, due to causes beyond the control of Purchaser, contain insufficient acceptable material, Forest Service will provide another source with adjustment in accordance with B5.253.

When Purchaser elects not to use designated sources, Purchaser shall furnish the specified product with no adjustment in unit rates. Quality testing shall be the responsibility of Purchaser. Test results shall be furnished to Forest Service.

When Purchaser elects not to use designated sources and the Schedule of Items lists pit development separately, cost allowance will be reduced under B5.253 when Forest Service determines the work will not be required.

When materials are subject to a weight measurement, the specific gravity or weight/volume relationship used as a basis for determination of estimated quantities shall be:

Source I N/A , Source II N/A , and Source III N/A .

Purchaser may, when agreed in writing, use on the project such suitable stone, gravel, and sand, or other material found in the excavation, and will earn a cost allowance for the excavation of such materials at the corresponding contract unit price and for the pay items for which the excavated material is used. Purchaser shall replace, without additional cost allowance, sufficient suitable materials to complete the portion of the work that was originally contemplated to be constructed with such material. Purchaser shall not excavate or remove any material, except that which is within the excavation limits, without written authorization from Forest Service.

When material is appraised from non-National Forest designated sources, owner charges for the material in terms of unit cost for royalties, purchase of raw materials, or finished products shall be as follows until 1/ N/A :

| Material | Type of Purchase | Owner(s) | Unit of Measure | Unit Price | Estimated Quantity | Total |
|-----------------|-------------------------|-----------------|------------------------|-------------------|---------------------------|--------------|
| | | N/A | | | | |
| | | | | | | |
| | | | | | | |

Should quantity vary from that estimated, payment to owners shall be for units actually obtained. Purchaser shall make arrangements with owner(s) for measurement and payment for royalties, purchase of raw materials, or finished products, as shown above.

Materials produced or processed from National Forest lands in excess of the quantities required for performance of this contract are the property of Forest Service, unless prior written agreement has been obtained to use excess material on other National Forest sales. Forest Service is not obligated to reimburse Purchaser for the cost of their production.

Materials shall be stored to assure the preservation of their quality and fitness for the work. Stored materials shall be located to facilitate their prompt inspection. Sites on Forest Service

administered land, approved by Forest Service, may be used for storage purposes and for the placing of Purchaser's plant equipment. All storage sites provided by Forest Service shall be restored at Purchaser's expense. Purchaser shall be responsible for making arrangements for storage on other than Forest Service administered lands.

When the construction of the portion of the project for which Temporary Roads used for hauling materials is completed, all such Temporary Roads shall be restored as nearly as practicable to their original ground profile, unless otherwise agreed in writing.

INSTRUCTIONS: Include in all new contracts with specified roads when National Forest sources are available or when agreement as to price, quantity, and time material is available has been obtained from private or non-National Forest sources.

In paragraph 5 enter weight/volume relationship used in the design to determine estimated quantities. Enter N/A when weight measurement is not used.

In paragraph 7 enter N/A when designated source is on National Forest land. Complete the table when purchaser payments are required for a designated private or commercial source. Enter the closing date of the signed agreement with material supplies and the type of purchase, i.e., royalty, raw material, or finished product.

1/ Enter date.

When there are specified roads and this provision is omitted the following will be added to the prospectus:

The Forest Service has appraised local material source from (Location of Source). Forest Service has not obtained any commitment for price, quantity, or when, or if, such material would be available. Bidders must make their own determination of price, availability, quantity, and time material will be available.

Sale Name: Halls Thin Reoffer

TABLE PURSUANT TO C5.31# – ROAD MAINTENANCE REQUIREMENTS (07/2001)

Purchaser shall maintain roads in accordance with the following
Contract Road Maintenance Requirements Summary:

Contract Road Maintenance Requirements Summary

| Road | Termini | | Miles | Applicable Prehaul Road Maintenance Specifications | | | | | | | | | | | | | |
|---------|---------|------|-------|--|------|------|------|------|------|------|------|------|------|------|------|--|--|
| | From | To | | T803 | T811 | T813 | T831 | T832 | T834 | T835 | T836 | T842 | T854 | T891 | T892 | | |
| 2223000 | 0.00 | 4.17 | 4.17 | P | | | D | D | D | | | P | P | | D | | |
| 2223000 | 4.17 | 8.32 | 4.15 | P | P | P | | | | | P | P | P | P | | | |
| 2223501 | 0.00 | 3.50 | 3.50 | P | P | P | | | | | P | | P | P | | | |
| 2223520 | 0.00 | 5.31 | 5.31 | P | P | | | | | | P | P | P | P | | | |
| 2223525 | 0.00 | 0.83 | 0.83 | P | P | | | | | | P | P | P | P | | | |

Contract Road Maintenance Requirements Summary

| Road | Termini | | Miles | Applicable During Haul Road Maintenance Specifications | | | | | | | | | | | | | |
|---------|---------|------|-------|--|------|------|------|------|------|------|------|------|------|------|------|--|--|
| | From | To | | T803 | T811 | T813 | T831 | T832 | T834 | T835 | T836 | T842 | T854 | T891 | T892 | | |
| 2223000 | 0.00 | 4.17 | 4.17 | P | | | D | D | D | | | P | P | | D | | |
| 2223000 | 4.17 | 8.32 | 4.15 | P | P | P | | | | | P | P | P | P | | | |
| 2223501 | 0.00 | 3.50 | 3.50 | P | P | P | | | | | P | | P | P | | | |
| 2223520 | 0.00 | 5.31 | 5.31 | P | P | | | | | | P | P | P | P | | | |
| 2223525 | 0.00 | 0.83 | 0.83 | P | P | | | | | | P | P | P | P | | | |

Contract Road Maintenance Requirements Summary

| Road | Termini | | Miles | Applicable Post Haul Road Maintenance Specifications | | | | | | | | | | | | | |
|---------|---------|------|-------|--|------|------|------|------|------|------|------|------|------|------|------|--|--|
| | From | To | | T803 | T811 | T813 | T831 | T832 | T834 | T835 | T836 | T842 | T854 | T891 | T892 | | |
| 2223000 | 0.00 | 4.17 | 4.17 | | | | D | D | D | | | P | | | D | | |
| 2223000 | 4.17 | 8.32 | 4.15 | | P | | | | | | P | P | | P | | | |
| 2223501 | 0.00 | 3.50 | 3.50 | | P | | | | | | P | | | P | | | |
| 2223520 | 0.00 | 5.31 | 5.31 | | P | | | | | | P | P | | P | | | |
| 2223525 | 0.00 | 0.83 | 0.83 | | P | | | | | | P | P | | P | | | |

P = Purchaser Performance Item, D = Deposit to Forest Service, D3 = Deposit to Third Party

Description of work required by the above listed T-specs is shown in the following
ROAD MAINTENANCE REQUIREMENTS SPECIFICATION table,
and included in the timber sale contract.

Sale Name: Halls Thin Reoffer

ROAD MAINTENANCE REQUIREMENTS SPECIFICATION TABLE PURSUANT TO
C5.31# - ROAD MAINTENANCE REQUIREMENTS (7/01)

| Road No. | 1 Termini | | 2 Special Spec's | 3 Travel Way | | | 4 Brushing and Log Out | | 5 Surfacing | 6 Dust Abatement | | | 7 Seasonal Maintenance | 8 Snow Removal | 9 Post Haul | |
|----------|--------------|------|------------------------|-----------------|------------|------|---------------------------------|-----|----------------|---------------------|------------------|-------|------------------------------|----------------------|----------------|-------|
| | 0.00 | 4.17 | | Width | X Slope | Comp | 10L | 10R | | Product | Applic . Rate | Width | | | Block | Treat |
| 2223000 | 0.00 | 4.17 | | | | | 10L | 10R | | | | | | | | |
| 2223000 | 4.17 | 8.32 | | EX | AI | B | 10L | 10R | 200 CY | | | | | | | PR |
| 2223501 | 0.00 | 3.50 | | EX | AI | A | | | 50 CY | | | W | | | | PR |
| 2223520 | 0.00 | 5.31 | | EX | AI | B | 10L | 10R | | | | | | | | PR |
| 2223525 | 0.00 | 0.83 | | EX | AI | A | 10L | 10R | | | | W | | | | PR |

ROAD MAINTENANCE REQUIREMENTS SPECIFICATION CODES TABLE
PURSUANT TO C5.31# - ROAD MAINTENANCE REQUIREMENTS (07/2001)

| Column No. | Heading | Entry | Explanation |
|------------|-------------------------------|----------------------|---|
| | Any | Blank | Except as otherwise described, no entry indicates Purchaser is not authorized or required to perform the work item(s). |
| | Any | RC | This work requirement applies only when haul of sale related construction materials occurs. |
| 2 | Special Project Specification | Number | Entry indicates Special Project Specification which applies. |
| 3 | Travel Way | EX | Purchaser shall maintain the traveled way to the width existing upon entry, or at the completion of Specified Road work. |
| | | Numbers | Purchaser shall maintain the traveled way to the standard width indicated by the entry, plus curve widening, in accordance with Section T-811. If required, the road template shall be shaped to this width and to the designated cross slope before haul and during recurring maintenance. |
| | | IS, C, OS, F, or AI | Cross slopes are designated as: IS (Inslope), C (Crown), OS (Outslope), F (Flat), AI (As Is). |
| | | A or B | If compaction is required. |
| 4 | Brush and Log Out | Numeric & R and or L | Purchaser shall remove brush for specified width on either or both the right (R) side or left (L) side of road. |
| | | As Staked | Limits of brushing are as staked or marked in the field. |
| | | OPT | Purchaser may use hand or mechanical means of brushing. |
| | | H | Only hand brushing may be used. |

ROAD MAINTENANCE REQUIREMENTS SPECIFICATION CODES TABLE
PURSUANT TO C5.31# - ROAD MAINTENANCE REQUIREMENTS (07/2001)

| Column No. | Heading | Entry | Explanation |
|------------|----------------------|-------------------|---|
| 5 | Surfacing | Aggregate Grading | Purchaser shall place surfacing on roads listed according to the grading indicated. |
| 6 | Dust Abatement | OPT | Product selection is Purchaser's choice from those listed in Section T-812. |
| | | Product Abbr. | Unless otherwise agreed, Purchaser is restricted to product listed corresponding to the abbreviation shown in Section T-812; (i.e., LigS = Lignon Sulfonate) Application rates are estimated amounts. |
| | | EX | Purchaser shall abate dust on the existing width |
| | | Numbers | Purchaser shall abate dust to the width indicated by entry. |
| 7 | Seasonal Maintenance | W | Waterbars and/or crossditching shall be required prior to expected seasonal precipitation. |
| | | B | Entrance barriers shall be installed by Purchaser prior to nonuse periods. |
| 8 | Snow Removal | TS | Snowplowing authorized for Purchaser's Operations without recreation access being provided per Section T-803 requirements. |
| | | JU | Snowplowing authorized, but must provide for recreation joint use per Section T-803 requirements. |
| | | Blank | Snowplowing is not authorized. Forest Service may authorize plowing by permit when not in conflict with other uses. |
| 9 | Post Haul | PR | PR denotes that work is Purchaser's Responsibility to perform. |

WO-C5.32#

C5.32# – ROAD MAINTENANCE DEPOSIT SCHEDULE. (7/01) Other provisions herein notwithstanding, when Forest Service requests payment in lieu of Purchaser's performance of road maintenance, Purchaser shall make Required Deposits (16 USC 537) for current and/or deferred road maintenance. Such deposits are based on the estimated volume and distance hauled and Purchaser's commensurate use of each road listed in the Road Maintenance Plan in C5.31#.

Purchaser and Forest Service may agree in writing on adjustment of such rates. If Purchaser uses roads under jurisdiction of Forest Service other than those listed in the Road Maintenance Plan, Forest Service shall establish rates commensurate with Purchaser's use of such roads.

The Required Deposits for Forest Service work in lieu of Purchaser performance and for deferred maintenance is: \$ 9.90 per CCF.

The following table lists who Purchaser will make deposits for road maintenance to, and the rate per unit of measure of the deposit. The Road Maintenance Agreement is available for inspection at the Forest Supervisor's office.

| Deposit Made To | Rate | Unit of Measure |
|------------------------|-------------|------------------------|
| N/A | | |
| | | |

SCHEDULE PURSUANT TO C6.315# - SALE OPERATION SCHEDULE (06/1994)

| Subdivision | Operating Conditions | Purpose |
|-------------|---|--|
| All | No ground based operations from November 1 through April 30, unless otherwise agreed to by Forest Service | To minimize damage to soil resources and residual trees. |
| All | No instream operations, such as culvert replacement, from September 1 through May 30. | To protect fish and other aquatic species and habitat |
| All | No construction, re-opening, or hauling on native surface spurs October 16 through May 14, unless otherwise agreed to by Forest Service | Water quality protection |
| All | No commercial use on legal holidays or weekends (Friday 6:00 p.m. through Sunday midnight) from Memorial Day through Labor Day. | To minimize impacts to recreationists |
| 72 | No weekend operations Memorial Day through Labor Day weekends Friday 6pm through Sunday. No operations on Memorial, 4 th of July, and Labor Day holidays. No operations the week of the 4 th of July if the day falls on a Tuesday through Thursday | To minimize impact to recreationists |
| 37 | No cable yarding from April 15 th through July 31 st . | To minimize impacts to residual trees |

TABLE PURSUANT TO C6.405# - ALTERNATE REMOVAL OF INCLUDED TIMBER (09/2004)

ALTERNATE REMOVAL AGREEMENT

TO BE COMPLETED UPON REQUEST BY AND AGREEMENT WITH PURCHASER.

TABLE PURSUANT TO C6.41# - SPECIFIC REQUIREMENTS (01/2000)

FELLING METHODS

SUBDIVISIONS

| | |
|--|-----|
| 1. Snags fell for safety will be left. | All |
| 2. Locations for all skyline corridors and ground skidding roads will be approved by Forest Service prior to beginning felling operations. | All |
| 3. Directionally fell away from streams and subdivision boundaries. | All |
| 4. Where skyline corridors cross riparian areas, operational trees should be directionally felled into stream channel, where possible. Trees will remain in place. | All |
| 5. Directional fall trees away from Areas To Protect (ATP). | 27 |
| 6. Directionally fall trees away from underground powercable. | 72 |

FELLING EQUIPMENT

SUBDIVISIONS

| | |
|--|-----|
| 1. Any method that will meet all requirements. | All |
| 2. Wedges and jacks. | All |

TABLE PURSUANT TO C6.42# - YARDING/SKIDDING METHODS (04/03)

Ground Based Yarding Requirements

SUBDIVISION

| | |
|--|---------------------------------------|
| <p>1. A ground based yarding system capable of transporting logs 1000 feet, utilizes an arch or equivalent system of elevating the lead end of the log and a cable drum system w/ a bull line. Ground based equipment shall not operate on slopes greater than 30 percent.</p> | |
| <p>2. To protect residual trees and minimize soil disturbance, skidding roads shall not be more than 15 feet in width and no closer than 120 feet apart. Where practical, the skidder should travel on slash.</p> | <p>27, 60, 370, 380, 410, 411</p> |
| <p>3. All ground based equipment is to stay on designated skid roads, and all skid roads will be agreed to by the Forest Service prior to use.</p> | |
| <p>4. No ground based operations in ATP shown on the sale area map.</p> | <p>27</p> |
| <p>5. If processor felling occurs, processor roads will be spaced at least 40 feet apart and processor will travel on slash</p> | <p>27, 60, 370, 380, 410, 411</p> |

TABLE PURSUANT TO C6.42# - YARDING/SKIDDING METHODS (continued) (04/03)

Skyline Yarding Requirements

SUBDIVISION

| | |
|--|---|
| <p>1. All skyline corridors must be approved by the Forest Service prior to timber felling.</p> | |
| <p>2. Except during lateral yarding, the yarding system must keep one end of the log suspended above the ground during the in-haul.</p> | |
| <p>3. Ground-lead yarding is permitted within 100 feet of subdivision boundaries and 100 feet of the tower position, and where necessary when crossing an intermediate support.</p> | |
| <p>4. Skyline roads will be spaced no closer together than 100 feet center to center at a point half-way to the end of the road when radial roads are used, and 150 feet center to center where parallel roads are used.</p> | |
| <p>5. Skyline corridors shall initially be made as narrow as practical, with the corridor being only wide enough to allow free passage of the carriage and turn of logs. The corridor shall normally not exceed 12 feet in width after yarding is completed.</p> | <p>8, 8a, 21, 27, 37, 61, 63, 72, 370, 380, 390, 400, 401, 402,</p> |
| <p>6. When the haulback line is used in areas of residual trees, haulback blocks shall be used to keep the haulback line as close to the ground as possible, reducing vertical line movement in the haulback line.</p> | <p>410, 411</p> |
| <p>7. The haulback line that is attached to the carriage shall be positioned, so that it remains within the skyline corridor. The objective is to protect residual trees by reducing lateral movement in the skyline.</p> | |
| <p>8. A slackpulling carriage capable of maintaining a fixed position on the skyline during lateral yarding and be able to pass over intermediate supports is required. The carriage must be capable of lateral yarding up to 75' from the skyline.</p> | |
| <p>9. Skyline corridors shall not enter Areas To Protect (ATP) designated areas. Yard away from ATP.</p> | <p>27</p> |
| <p>10. Lateral yarding required away from underground powercable</p> | <p>72</p> |

TABLE PURSUANT TO C6.42# - YARDING/SKIDDING METHODS (continued) (04/03)

Helicopter Yarding Requirements

SUBDIVISION

| | |
|---|--|
| <p>1. A yarding system capable of lifting 4500 pounds at an elevation of 3000 feet above sea level at 69°F and transporting logs fully suspended at least 3600 feet slope distance. Both uphill and downhill loaded flight paths are planned.</p> <p>2. Logs must be broken free of their beds vertically and totally suspended during the in-haul above residual canopy.</p> | <p>7,17,17a,19,20, 35,35g, 37a,37g,39,72</p> |
|---|--|

APPLICATION SCHEDULE PURSUANT TO C6.6# - EROSION CONTROL AND SOIL TREATMENT BY PURCHASER (7/01)

| SUB-DIVISION | AREAS A) SKID AND FORWARDER ROADS B) FIRELINES C) TEMP. ROADS D) LANDINGS E) OTHER | GRASS | | MULCH | |
|--------------|---|------------------------------|--------|----------------|--------|
| | | APPLICATION | | APPLICATION | |
| | | SPECIES <u>1/</u> MIXTURE | LBS/AC | TYPE <u>3/</u> | LBS/AC |
| All | A, C, D | Blue Wild Rye | 20 | | |

1/ The seed shall meet the appropriate State (Oregon or Washington) certification specifications. Seed must be packaged in containers carrying official certification labels sewn in, glued to, or printed upon the container, with the following information:

1. Variety (if certified as to variety) and kind.
2. Quantity of seed (pounds or bushels).
3. Class of certified seed (blue tags for certified seed, purple tags for registered seed, or white tags for foundation seed).
4. Inspection or lot number traceable to the certifying agency's records.

For mixtures of certified seed, each ingredient in excess of 5 percent must be listed with its percentage by weight and its germination percentage.

Legumes must be inoculated with nitrogen fixing bacteria before planting. The label must show the expiration date of the inoculant.

All seed treated with a fungicide or pesticide must be labeled that it is "treated" giving the name of the chemical used, and an appropriate warning or a caution statement.

3/ Mulch shall meet the appropriate State's certification specifications, with evidence of its certification traceable to the certifying agency's records.

**DETAILED SLASH DISPOSAL PLAN
Halls Thin Re-offer Timber Sale
Willamette National Forest, Detroit Ranger District**

•In accordance with Contract Provisions C6.74, Slash Treatment Requirements and Detailed Slash Disposal Plan

•Not with standing Contract Provision C6.74

Purchaser responsibilities are as follows:

A) **Construction and size of landing piles:** The purchaser shall pile substantially all created slash at least 1 inch in diameter on the small end and at least 3 feet in length. Created slash shall be piled as compact as possible and free of soil and rocks. Landing piles shall be a minimum of 8 feet in height and 10 feet in diameter. Height of piles should not exceed 15 feet nor be greater than the diameter of the pile. The area around each pile shall be cleared of all created slash a minimum of 6 feet. All pieces extruding from piles shall be bucked off to facilitate covering after construction.

B) **Location of all grapple and landing piles:** Slash piles will be located to minimize damage of standing green trees and snags during burning. Unless otherwise agreed, this will be construed to be at least 10 feet from standing green trees and snags. Piles should not be built on tree stumps or heat sinks. Piles should not be located in the bottom of draws, streams, or ditches and should not obstruct roadways.

C) **Construction and size of grapple and area to be piled:** For ground base portion of subdivision only in **Subdivisions #27, #370, #380, and #410:** Substantially all created slash within the above listed subdivisions will be grapple piled. Grapple piles will be constructed with a "lift and pile" mechanism rather than a "push and pile" mechanism. Piles shall be as compact as possible and free of soil and rocks. Pile substantially all created slash that is at least 1 inch in diameter at the small end and at least 3 feet in length. Pile diameter shall not be greater than 10 feet and height of piles shall not be greater than the pile diameter. The area around each pile shall be cleared of all created slash a minimum of 6 feet. All pieces extruding from the piles shall be bucked off to facilitate covering after construction.

D) **Location of roadside grapple piles:** Slash piles will be located to minimize damage of standing green trees and snags during burning. Unless otherwise agreed, this will be construed to be at least 10 feet from standing green trees and snags. Piles should not be built on tree stumps or heat sinks. Piles should not be located in the bottom of draws, streams, or ditches and should not obstruct roadways.

E) **Construction and size of Roadside grapple piles and area to be piled:** **Subdivisions #21, #390, #400, #402 and # 411:** Substantially all created slash within 33 feet into the subdivisions along spur roads 520, 501 and 512 will be roadside grappled. Roadside grapple piles will be constructed with a "lift and pile" mechanism rather than a "push and pile" mechanism. Piles shall be as compact as possible and free of soil and rocks. Pile substantially all created slash that is at least 1 inch in diameter at the small end and at least 3 feet in length. Pile diameter shall not be greater than 10 feet and height of piles shall not be greater than the pile diameter. The area around each pile shall be cleared of all created slash a minimum of 6 feet. All pieces extruding from the piles shall be bucked off to facilitate covering after construction.

F) Covering of all grapple and roadside grapple piles: All grapple and roadside grapple piles shall be covered with polyethylene plastic film .004 inches thick. Plastic size should be approximately 100 square feet. Plastic shall be placed in locations that will ensure safe and adequate ignition can be achieved to allow consumption of piles. For large piles, plastic shall not be placed in locations that require individuals igniting piles to climb higher than 8 feet onto piles. Pieces of burnable material shall be placed on top of the plastic to keep the plastic from filling with wind and blowing off.

G) Yarding tops attached to the last log: Sub Divisions #8, and #8a:

Tops left attached to the last log pursuant to C6.74# will be yarded to the landing and shall be piled after being severed from the attached log. Pile created slash that is at least 1 inch in diameter on the small end and at least 3 feet in length. Unless otherwise agreed to in writing, all pieces meeting non-saw specifications and longer than 8 feet shall be placed in a separate pile(s). The pieces in the pile shall be placed parallel to each other similar to log decks, and placed where shifting and rolling will not occur and at least 10 feet from other piles.

H) Hand Fireline: Sub Divisions #7, #37, #37a, #39, #63 and #72: Hand firelines shall be cleared of all brush and debris for a minimum width of 10 feet with the edge of the clearing inside the sub division boundary. Debris created from the clearing shall be scattered inside the sub division to reduce the creation of a windrow of slash along the fire line. A continuous fire line, minimum of 18 inches wide, shall be dug to mineral soil within the outer portion of the clearing.

1. **Unit #7** shall have approximately 3600 feet of fire line constructed. Fire line construction shall begin/end continuing around the outside boundary of the Payment Unit.

2. **Unit #37** shall have approximately 3075 feet of fire line constructed. Fire line construction shall begin/end continuing around the outside boundary of Payment Unit.

3. **Unit #37a** shall have approximately 2170 feet of fire line constructed. Fire line construction shall begin/end continuing around the outside boundary of Payment Unit.

4. **Unit #39** shall have approximately 3630 feet of fire line constructed. Fire line construction shall begin/end continuing around the outside boundary of Payment Unit.

5. **Units #63 and #72** shall have approximately 10,900 feet of fire line constructed. Fire line construction shall begin/end on the west side of Rd 2223-520 and follow Unit boundary and end/begin at the east end of Rd. 2223-520.